

EXHIBIT P

Create and manage speaker groups

Group any combination of Google Nest or Google Home speakers and displays, Chromecast devices, and speakers with Chromecast built-in together for synchronous music throughout the home. Your favorite music and audio from Chromecast-enabled apps are instantly available to stream.

Compatible devices include speakers and displays (Google Home, Google Nest Mini (2nd gen), Google Home Mini (1st gen), Google Home Max, and Google Nest displays), Chromecast, Chromecast Ultra, Chromecast Audio, TVs with Chromecast built-in and speakers with Chromecast built-in.

Note: This feature is not supported on Chromecast (1st generation).

Step 1. Create and manage speaker groups

Create an audio group



1. Make sure all audio devices and your mobile or tablet are connected to the [same Wi-Fi network](#).
2. Open the Google Home app .
3. At the top left, tap **Add + > Create speaker group**.
4. Tap each device you want to add to the group. A check  will appear next to each device you select.
5. Tap **Next > Enter a name for your group > Save**.

Edit an existing group



1. Make sure all audio devices and your mobile or tablet are connected to the [same Wi-Fi network](#).
2. Open the Google Home app .
3. Tap your speaker group  **Settings  > Choose devices**.
4. Tap each device you want to add to the group. A check  will appear next to each device you select.
5. Tap each device you want to remove from the group. The check  will

disappear.

6. Tap **Next**.

Important: If you're making edits to a group that is currently casting music, group playback will stop and you'll no longer hear media on any audio device within the group. You'll need to return to the Cast-enabled app or say a voice command to start casting media again.

Delete an existing group ^

1. Make sure all audio devices and your mobile or tablet are connected to the same Wi-Fi network.
2. Open the Google Home app .
3. Tap your speaker group > Settings  > Delete Group > Remove.

Important: If you're deleting a group that is currently casting music, group playback will stop and you'll no longer hear media on any audio device in the group.

Step 2. Control speaker groups

Note: Changing the volume of an individual speaker in a group will change the group's volume.

Using your voice ^

Playing audio groups is like playing [audio on individual remote devices](#) except you'll say "Ok Google, ... on <group name>" instead of "Ok Google,... on <device name>".

Note: Make sure to [voice-enable the group](#) to control it with your voice.

To do this...	Say "Ok Google" or "Hey Google," then...
Play music using group name	"Play rock on <group name>"

Control music using basic commands	"Pause, resume, stop, play next song"
Control volume Note: During group playback, volume commands only change the local Google Home device unless you say "Ok Google, ... on <Group name>."	"Set volume to 5," "Set volume to 40%"

From the Google Home app

1. Make sure your mobile device or tablet is connected to the same Wi-Fi as your speaker or display.
2. Open the Google Home app .
3. Tap your speaker group.

You'll see the following information for the current music session:

- Content provider
- Title (song name / show episode name / radio station program)
- Artist (if available)
- Collection (playlist / album / show series / radio station) (if available)

You can also pause/resume, stop, and control group members volume.

From the Google Nest or Google Home device



Google Home

To do this:	Touch Google Home like this:	Image
Play,	Tap once on the top of the device.	

pause, or stop alarm or timer 		
Turn up the volume 	Swipe clockwise on the top of the device. Note: This only adjusts the volume of media. You can adjust alarms and timers volume anytime in the Google Home app.	
Turn down the volume 	Swipe counterclockwise on the top of the device. Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level. It doesn't adjust the volume of alarms and timers.	
Start your request 	Press and hold down on the top of the device.	
Mic on/off	Press the microphone mute button on the back of the device. Note: Muting the microphone prevents Google Home from listening or responding. To interact with Google Home, the microphone must be on.	
Factory reset the device	Press and hold the factory reset button located on the back of Google Home.	
Turn off power	Unplug power cable from Google Home.	

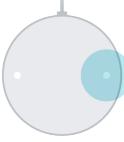
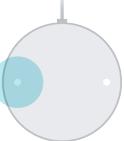


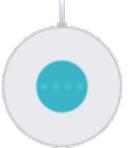
Google Nest Mini (2nd gen)



Note: The Google Nest Mini (2nd gen) has a wall mount screw slot on the

back. If your device doesn't have a wall mount screw slot, it is a Google Home Mini (1st gen).

To do this:	Touch Google Nest Mini like this:	Image
Play, pause, or stop media or end a current phone call	Tap the center of the Nest Mini.	
Stop a ringing alarm or timer	Tap the center of the Nest Mini.	
Turn up the volume	<p>Tap the right side of the Nest Mini. 10 total taps will be maximum volume.</p> <p>Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level. It doesn't adjust the volume of alarms and timers.</p> <p>To reverse controls, open the Home app  > tap your device > Settings  > Reverse device controls.</p>	
Turn down the volume	<p>Tap on the left side of the Nest Mini. 10 total taps will mute all audio except your Google Assistant.</p> <p>Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level.</p>	

	<p>It doesn't adjust the volume or alarms and timers.</p> <p>To reverse controls, open the Home app  > tap your device > Settings  > Reverse device controls.</p>	
Turn mic on/off	<p>Toggle the mic on/off switch found next to the power cord. The switch will display orange when the microphone is turned off.</p> <p>Note: Turning off the microphone prevents Nest Mini from listening or responding. To interact by voice with Nest Mini, the microphone must be on.</p>	
Factory reset the device	<p>Turn the mic off, then press and hold the lights in the center of the Nest Mini.</p> <p>Hold for about 15 seconds.</p>	
Turn off power	Unplug the power cable from Nest Mini.	
Start your request 	<p>Note: You can't press and hold the top of the Nest Mini to start a request with your Assistant.</p> <p>Instead, say "Ok Google" to start your request.</p>	



Google Home Mini (1st gen)



To do this:	Touch Google Home Mini like this:	Image
Play, pause, or stop media or end a current	Press and hold either side of Home Mini.	

Current phone call		
Stop a ringing alarm or timer	Press and hold either side of Home Mini.	
Turn up the volume	<p>Tap on right side of Home Mini. To reach maximum volume, tap to volume level 10.</p> <p>Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level. It doesn't adjust the volume of alarms and timers.</p>	
Turn down the volume	<p>Press and hold left side of Home Mini. 10 total taps will mute all audio except your Google Assistant.</p> <p>Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level. It doesn't adjust the volume of alarms and timers.</p>	
Turn mic on/off	<p>Toggle the mic on/off switch found next to the power cord. The switch will display orange when the microphone is turned off.</p> <p>Note: Turning off the microphone prevents Home Mini from listening or responding. To interact with Home Mini, the microphone must be on.</p>	
Factory reset the device	<p>Press and hold the factory reset button located below the power cord on the bottom of Home Mini. Look for a circle etched into the base.</p> <p>Hold for about 12 seconds.</p>	
Turn off power	Unplug the power cable from Home Mini.	

Start your request	<p>Note: You can't press and hold the top of Home Mini to start a request with your Assistant.</p> <p>Instead, say "Ok Google" to start your request.</p>	



Google Home Max



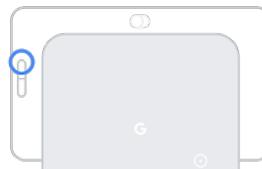
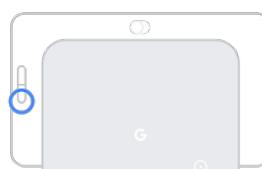
To do this:	Touch Google Home Max like this:	Image
Play, pause, or stop media. Stop a ringing alarm or timer End a call	<p>Horizontal placement: Tap the line located on the top of Max.</p> <p>Vertical placement: Tap the line located on the right side of Max.</p>	
Turn up the volume	<p>Horizontal placement: Swipe from left to right along the line located on the top of Max.</p> <p>Vertical placement: Swipe up along the line located on the right side of Max.</p>	
Turn down the volume	<p>Horizontal placement: Swipe from right to left along the line located on the top of Max.</p> <p>Vertical placement: Swipe down along the line located on the right side of Max.</p>	

Turn mic on/off	<p>Toggle the mic on/off switch located on the back of Max. The switch will display orange when the microphone is turned off. You can't use your voice or the Google Home app to turn on/off the mic.</p> <p>Note: Turning off the microphone:</p> <ul style="list-style-type: none"> • prevents Google Home from listening or responding. To interact with Google Home, the microphone must be on. • turns off Room EQ. 	
Factory reset the device	<p>Press and hold the factory reset button located above the power cord on the back of Max. Look for a small grey button.</p> <p>Hold for about 12 seconds.</p>	
Turn off power	Unplug the power cable from Max.	



Google Nest Hub



To do this:	Touch Google Nest Hub like this:	Image
Turn up the volume	Press the upper volume button on the back of Google Nest Hub.	
Turn down the volume	Press the lower volume button on the back of Google Nest Hub.	



Google Nest Hub Max



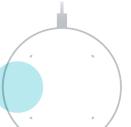
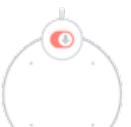
To do this:	Touch Nest Hub Max like this:	Image
Turn up the volume	Press the upper volume button on the back of Nest Hub Max.	
Turn down the volume	Press the lower volume button on the back of Nest Hub Max.	



Google Nest Wifi point



To do this:	Touch Nest Wifi point like this:	Image
Play, pause, or stop media or end a current phone call	Tap the center of the Nest Wifi point.	
Stop a	Tap the center of the Nest Wifi point.	

ringing alarm or timer		
Turn up the volume	<p>Tap on the right side of the Nest Wifi point.</p> <p>10 total taps will be maximum volume.</p> <p>Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level.</p> <p>It doesn't adjust the volume of alarms and timers</p>	
Turn down the volume	<p>Tap on the left side of the Nest Wifi point.</p> <p>10 total taps will mute all audio except your Google Assistant.</p> <p>Note: This only adjusts the volume of media and your Google Assistant. At volume level 0, all media will be muted but your Google Assistant will still speak at a minimum level.</p> <p>It doesn't adjust the volume of alarms and timers.</p>	
Turn mic on/off	<p>Toggle the mic on/off switch found next to the power cord. The switch will display orange when the microphone is turned off.</p> <p>Note: Turning off the microphone prevents Nest Wifi point from listening or responding. To interact by voice with your Nest Wifi point, the microphone must be on.</p>	
Turn off power	Unplug the power cable from Nest Wifi point.	
Start your request	<p>Note: You can't press and hold the top of a Nest Wifi point to start a request with your</p>	

	Assistant. Instead, say "Ok Google" to start your request.
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Audio delay issues

Do you hear a delay between one device in the group and the others? Use the [group delay correction setting](#) for that device to resolve the issue.

Important: Pressing your phone or tablet's volume buttons (on the side of your phone or tablet) while in the Google Home app will **not adjust the volume**.



Note: Speaker group creation is only available on a phone or tablet. This feature is not supported from the Chrome browser. However, you can still [cast to a group](#)  from Chrome.

Was this helpful?

[Yes](#)

[No](#)